



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/002,180	12/05/2001	Amir Satran	10236-039	3617	
26158 7	590 09/12/2003				
WOMBLE CARLYLE SANDRIDGE & RICE, PLLC			EXAMINER		
P.O. BOX 7037 ATLANTA, GA 30357-0037			PETERSON, KENNETH E		
			ART UNIT	PAPER NUMBER	
			3724		
		DATE MAILED: 09/12/2003			
				10	

Please find below and/or attached an Office communication concerning this application or proceeding.

				(
		Application No.	Applicant(s)			
Office Action Summary		10/002,180	SATRAN ET AL.			
		Examiner	Art Unit	_		
		Kenneth E Peterson	3724			
Period f	or Reply	ears on the cover sheet with the c	orrespondence address			
THE - Extra afte - If th - If N - Fail - Any	MORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. ensions of time may be available under the provisions of 37 CFR 1.13 r SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a reply o period for reply is specified above, the maximum statutory period we ure to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
1)[\implies]	Responsive to communication(s) filed on 01 J	luly 2003				
2a)□	· · · · _ 	is action is non-final.				
3)	Since this application is in condition for allowa		respectation as to the morits is			
,	closed in accordance with the practice under a tion of Claims					
4)🖂	Claim(s) <u>1-6</u> is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)	Claim(s) is/are allowed.					
6)⊠	⊠ Claim(s) <u>1-6</u> is/are rejected.					
7)						
	Claim(s) are subject to restriction and/or	r election requirement.				
Applicat	tion Papers					
	The specification is objected to by the Examiner					
10)	The drawing(s) filed on is/are: a) accept					
	Applicant may not request that any objection to the					
11) 🔀	The proposed drawing correction filed on <u>01 Jul</u>		sapproved by the Examiner.			
If approved, corrected drawings are required in reply to this Office action.						
	The oath or declaration is objected to by the Exa	aminer.				
	under 35 U.S.C. §§ 119 and 120					
	13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a	a) All b) Some * c) None of:					
	1. Certified copies of the priority documents have been received.					
•	2. Certified copies of the priority documents have been received in Application No					
* ;	 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
	Acknowledgment is made of a claim for domestic					
á	a) The translation of the foreign language pro- Acknowledgment is made of a claim for domestic	visional application has been rec	eived.			
Attachmer		5 p511, Gridor 65 5.0.0. 33 120	did/ULIEL			
1) Notice	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal P	(PTO-413) Paper No(s) Patent Application (PTO-152)			
-, mio		0) L_1 Ower: .				

Application/Control Number: 10/002,180

Art Unit: 3724

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the cutting insert being thicker at the inner portion than at the outer portion, as in claims 5 and 6, must be shown or the feature canceled from the claims. Furthermore, the linear outer portions, as in claim 5, must be drawn linear or the feature canceled from the claims. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the European patent to Arai et al (EP 0 505 574).

Arai shows a milling cutter having a circular disk with inserts received therein as best seen in figures 1,6 and 7. Each insert contacts a radially extending pocket rear surface at two spaced apart abutment surfaces, as best seen in figure 1.

Arai's insert has a flat top and bottom surface, a screw (107), corners of diminished thickness (at 112), and four concave, arcuate side surfaces (109,110) with respective arcuate cutting edges (111). Arai's side surfaces and cutting edges extend

Page 3

Art Unit: 3724

inwardly (at 110), but not at the outer portion thereof (at 109). However, the Examiner takes Official Notice that it is common for milling inserts to have acutely angled corners. For example, see the Betman et al. '137 patent or the Lynde '958 patent. It would have been obvious to one of ordinary skill in the art to have made Arai's insert corners be acutely angled, even at the outer portion, as is well known and exampled by Betman and Lynde, in order to achieve the superior corner cutting that comes with acutely angled insert corners.

Examiner further takes Official Notice that it is common for many different types of milling tools to use the same insert. Lathes, rotary millers and the like all operate on the same principle of relative motion between the insert and the workpiece and thus the same inserts are found to effective in different types of milling. For this reason, inserts from one type of milling machine can provide teachings for inserts on a different type of milling machine.

- 4. Made of record is a patent to Lunblad further discussing spaced apart abutment surfaces (figure 2).
- 5. Applicant's arguments with respect to the claims are well taken, but are moot in view of the new, non-final grounds of rejection.

Applicant's proposed drawing correction does not actually *show* the insert being thicker in the middle, and thus the proposed drawing is not accepted.

Application/Control Number: 10/002,180

supervisor, Allan Shoap can be reached at 703-308-1082.

Art Unit: 3724

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Peterson whose telephone number is 703-308-2186. The examiner can normally be reached on Monday-Thursday, 7:30-4:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's

All responses are encouraged to be by fax at 703-872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

kp 9-Sep-03

> KENNETH E. PETERSON PRIMARY EXAMINER

Page 4